



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

*Patricia Lelievre*  
#17 Appeal

Appellants: Jay S. Walker, Andrew S. Van  
Luchene

Application No.: 09/045,036

Filed: March 20, 1998

For: SYSTEM AND METHOD FOR  
FACILITATING THE PLAY OF  
FRACTIONAL LOTTERY TICKETS  
USING POINT-OF-SALE  
TERMINALS

) Group Art Unit: 3622  
) Examiner: John L. Young  
)  
) APPEAL BRIEF  
)  
) Attorney Docket No. 97-558  
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Dated: June 30, 2003 By: Veronika S. Lelievre

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AND INTERFERENCES

Commissioner for Patents  
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Dear Examiner:

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the decision of the Examiner in the Final Office Action mailed June 25, 2002 (Paper No. 12), rejecting claims 1 - 36.

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**APPENDIX A: CLEAN COPY OF CLAIMS INVOLVED IN THE APPEAL**

**APPENDIX B: CHART SHOWING CLAIM DEPENDENCIES**

## REAL PARTY IN INTEREST

The present application is assigned to Walker Digital, LLC, 1177 High Ridge Road, Stamford, CT 06905.

## RELATED APPEALS AND INTERFERENCES

Appellants are aware of the following appeal, which might be considered to directly affect, be directly affected by or have a bearing on the Board's decision in the pending appeal:

Serial No. 09/107,971, filed June 30, 1998, entitled "METHOD AND APPARATUS FOR FACILITATING THE PLAY OF FRACTIONAL LOTTERY TICKETS UTILIZING POINT-OF-SALE TERMINALS".

The above application is a continuation-in-part of the present application. Further, although the claims of the two applications are patentably distinct, both appeals involve the same examiner, the same references, and the same general interpretations of the references as applied to several claims.

## STATUS OF CLAIMS

Claims 1 - 36 are pending in the present application and are being appealed.

Claims 1 - 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of:

- U.S. Patent No. 5,548,110 to Storch;
- U.S. Patent No. 5,772,510 to Roberts; and
- "Heads I Win, Tails You Lose", The Economist, June 13, 1992, ("The Economist");

Claims 25 - 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over a combination of Storch and Roberts.

## STATUS OF AMENDMENTS

No amendments were filed subsequent to final rejection.

## SUMMARY OF INVENTION

Generally, according to one aspect of the invention, a computing device such as a store controller determines a monetary value, such as an amount of spare change due to a customer in connection with a transaction at a POS terminal. Application, page 4, lines 17 - 18. The store controller allocates a portion of a lottery ticket for the customer based on the monetary value. Application, page 4, lines 18 - 19. The portion may be, for example, equal to the monetary value, or may be the monetary value rounded to the nearest nickel. Application, page 4, lines 19 - 21. The store controller outputs a ticket identifier that identifies the lottery ticket (e.g. a serial number) and a portion identifier that identifies the allocated portion of the lottery ticket (e.g. \$0.34 of a \$2.00 lottery ticket). Application, page 4, lines 21 - 23. Typically, the store controller outputs the identifiers to a POS terminal, which prints a fractional lottery ticket redeemable for a portion of the lottery ticket's prize. Application, page 4, line 23 - page 5, line 2. The store controller also stores the ticket identifier and the portion identifier, to assure that fraudulent tickets will be detected. Application, page 5, lines 2 - 4.

After a drawing date for the lottery ticket, the customer redeems the fractional lottery ticket, typically at a POS terminal, if a prize is due. Application, page 5, lines 5 - 6. The POS terminal communicates with the store controller, which receives the ticket identifier and the portion identifier therefrom. Application, page 5, lines 6 - 8. From the received identifiers, the store controller may determine a prize value of the corresponding lottery ticket. Application, page 5, lines 8 - 9. The customer is, in turn, provided with a portion of the prize value based on the allocated portion of the ticket. Application, page 5, lines 9 - 10.

## ISSUES

Whether claims **1 - 24** are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of a combination of Storch, Roberts, and The Economist.

Whether claims **25 - 36** are unpatentable under 35 U.S.C. § 103(a) as being obvious in light of a combination of Storch and Roberts.

## GROUPING OF CLAIMS

The claims in different groups do not stand and fall together.

Appellants group the pending claims as follows:

Group I - claims **1, 6, 11, 12**;

Group II - claims **2, 7**;

Group III - claims **3, 8**;

Group IV - claims **4, 9**;

Group V - claims **5, 10**;

Group VI - claims **13, 17**;

Group VII - claims **14, 15, 18 and 19**;

Group VIII - claims **16, 20**;

Group IX - claims **21, 22, 23, 24**;

Group X - claims **25, 28, 31, 34**;

Group XI - claims **26, 27, 32, 33**;

Group XII - claims **29, 30, 35, 36**;

Appellants believe that claims in different groups are separately patentable, as explained below.

## ARGUMENT

As explained below, the Examiner's rejection of the claims is improper at least because the Examiner has failed to set forth the required *prima facie* case of unpatentability of any claim. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references of record, alone or in combination. Further, various rejections are based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Moreover, regardless of the failure to present a *prima facie* case, the cited references, whether alone or in any combination, cannot be interpreted in a manner that would render any pending claim obvious.

Accordingly, the rejections are inappropriate and Appellants respectfully request that the Examiner's rejections be reversed.

In the arguments herein, limitations of the claims are indicated in *italics*, and the references of record are indicated by underlining.

In separate arguments of patentability of different Groups, Appellants have, where possible, referred to prior arguments to avoid undue repetition.

### The References

The Examiner has relied on a combination of references in the rejection of all claims. However, the references cited by the Examiner, either alone or in combination, do not disclose or suggest all of the limitations of any claim.

Discussed immediately below are the references used in rejecting the appealed claims: Storch, Roberts, and The Economist.

#### **The Storch patent**

In summary, Storch discloses optimal coding, particularly for bar codes, in which errors may be detected and / or corrected, and in which information may be encoded more compactly and more reliably. Col. 4, lines 26 - 33. Storch also discloses methods and apparatus for

obtaining, coding and processing information, particularly with respect to bar codes. Col. 4, lines 38 - 41. The general coding methodology of Storch is to employ information coded in binary arithmetic. Col. 4, lines 34 - 36. The methodology also allows for error detection and correction. Col. 4, lines 44 - 47. Storch also purports to improve the coding, transfer, processing and / or storage of information, as well as the reliability thereof. Col. 3, line 66 – Col. 4, line 2.

Storch also purports to improve counterfeit detection and / or deterrence. Col. 4, lines 10 – 11. Storch asserts that the disclosed system is applicable to counterfeitable products, such as lottery tickets. Col. 4, lines 58 - 61. Enhanced bar code formats disclosed by Storch are designed for lottery tickets. Col. 67, lines 11 - 16; Col. 72, lines 26 - 27; FIG. 22. Security ID numbers are already printed on instant winning lottery tickets. Col. 66, lines 32 - 34. Bar codes on such tickets would allow all winning tickets to be validated. Col. 66, lines 46 - 52.

### **The Roberts patent**

In summary, Roberts describes a lottery ticket with a blank region, to have printed thereon information necessary to complete the ticket. Abstract, lines 1 - 3; Col. 2, lines 3 - 6. Such necessary information includes 'play data', which determines the win/lose outcome of the ticket. Abstract, lines 3 - 5; Col. 2, lines 6 - 8. More particularly, the 'play data' which is printed in the blank region can be a 'lucky' number. Col. 4, lines 29 - 34. The information necessary to complete the ticket may be in both a bar code format and a human readable format. Col. 4, lines 10 - 18; FIG. 2B.

With such an arrangement, completed lottery tickets are not stored prior to purchase; only during purchase is the non-completed lottery ticket printed with information necessary to provide the purchaser with a completed lottery ticket. Col. 2, lines 25 - 29. This way, if non-completed tickets are stolen, the thief will not be in possession of completed lottery tickets. Col. 2, lines 29 - 31.

### **The Economist publication**

The Economist is a paragraph that briefly recounts a method to eliminate change in transactions. A shopper randomly chooses a number from 1 to 100, and the cash register does the same. Lines 3 - 5. The two numbers are added together. Lines 5 - 6. Based on this sum, the

price is either rounded up or down. Lines 6 - 9. The laws of probability ensure that both parties will get a fair deal in the long run. Lines 9 - 10.

## 1. Group I

Group I includes independent claims **1, 6, 11 and 12**.

As discussed below, the rejection of the claims of Group I is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group I. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group I can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group I obvious.

### 1.1. Independent Claims 1, 6, 11 and 12

Independent claim **1** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and allocating a portion of a ticket, the portion being based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket are output, and the ticket identifier and the portion identifier are stored.

Independent claim **6** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **1**.

Independent claim **11** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and allocating a portion of a ticket each ticket of a plurality of tickets, the portion of each ticket being associated with a portion of the monetary value.

*Group I*

A plurality of ticket identifiers that identify the plurality of tickets and a plurality of portion identifiers that identify the plurality of allocated portions of each ticket are output, and the ticket identifiers and the portion identifiers are stored.

Independent claim 12 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 11.

For brevity, the discussion below refers to method claim 1, but the arguments are likewise applicable to claims 6, 11 and 12.

## 1.2. Advantages of Independent Claim 1

The embodiment of claim 1 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

As discussed in the present application and its parent applications incorporated by reference therein, by *allocating a portion of a ticket*, a 'fractional' lottery ticket may be created and provided, e.g., to a customer. For example, for \$0.26, the customer may be sold a 26% share of a \$1 lottery ticket. Application, page 3, lines 11 - 13. Thus, for example, a purchaser need not be constrained to purchase lottery tickets in only multiples of full denominations (e.g., only in multiples of \$1 for \$1 tickets). This affords the purchaser more flexibility, and allows merchants to sell such fractional lottery tickets at many, differing prices and in a greater variety of ways.

Because *the portion of the ticket which is allocated is based on a monetary value*, the portion of the ticket that is allocated (and thus the value of the fractional lottery ticket) is tied to some monetary value, such as an amount paid by a customer. Such an amount paid could, e.g., dictate the size of the portion of the ticket, and thus the corresponding value of the ticket if it is a winning ticket. For example, for \$0.26, the customer may be sold a 26% share of a \$1 lottery ticket. Application, page 3, lines 11 - 14. Further, because the *allocated portion* of the ticket is *based on a monetary value*, any corresponding ticket winnings, which are likewise based on the *allocated portion*, are likewise related to the *monetary value*. For instance, one could require that the benefit of higher potential winnings (from greater portions of tickets) will require higher monetary values.

Group I

The *ticket identifier* and the *portion identifier* identify the ticket and the allocated portion thereof. By *outputting* the *ticket identifier* and the *portion identifier*, another entity (besides the one performing the method) can access these identifiers. This information is useful because these identifiers can be used to indicate, e.g., whether or not the identified ticket is a winning ticket, and / or what portion (if any) of winnings are represented.

By *storing* the *ticket identifier* and the *portion identifier*, tickets and allocated portions thereof may be tracked. With knowledge of tickets and allocated portions thereof, one can allocate additional tickets more efficiently. For instance, one can determine the unallocated portions of tickets that remain, and /or further allocate portions of those tickets accordingly. See, e.g., application, page 12, lines 9 – 18. As another example, with knowledge of tickets and allocated portions thereof, one can determine whether no single lottery ticket has an unallocated portion sufficient to satisfy a particular request (or an anticipated request) for a fractional lottery ticket. See, e.g., application, page 18, lines 6 – 10. As another example, with such information stored, it can be determined whether one should acquire additional lottery tickets for the supply of lottery tickets because existing supplies are insufficient. See, e.g., application, page 19, lines 3 – 9.

The *ticket identifier* and the *portion identifier* are both *stored* and both are also *output*. Thus, a *ticket identifier* and a *portion identifier* that are supposed to have been previously *output* may be compared with stored identifiers to determine their accuracy. For instance, a *ticket identifier* and a *portion identifier* that were supposedly printed by a POS terminal and presented for redemption can be compared to stored *ticket identifiers* and *portion identifiers*. If no such *ticket identifier* and *portion identifier* were stored, then one may conclude that the *ticket identifier* and *portion identifier* are instead forgeries.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### **1.3. No Prima Facie Showing of Unpatentability of the Claims of Group I**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not *Group I*

disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a *prima facie* case of obviousness of any claim of the Group.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). To reject claims in an application under section 103, an examiner must show an unrebutted *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent. In re Oetiker, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

The factual predicates underlying an obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998). The secondary considerations are also essential components of the obviousness determination. In re Rouffet, 149 F.3d 1350, 1355 (Fed. Cir. 1998).

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

When a rejection is based on a combination of references, the Examiner can satisfy the *prima facie* burden only by showing some objective teaching leading to the purported combination of references. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). Lacking a motivation to combine references, there is no *prima facie* case of obviousness. In re Rouffet, 149 F.3d 1350, 1358 (Fed. Cir. 1998).

Finally, during examination, claims are given their broadest reasonable interpretation consistent with the specification. In re Hyatt, 211 F.3d 1367 (Fed. Cir. 2000). The "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in applicant's specification." In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997).

*Group I*

### 1.3.1. No showing that the references suggest *allocating a portion of a ticket*

The Examiner has not shown that the references, alone or in combination, suggest *allocating a portion of a ticket*. The closest the Examiner comes is a conclusory statement that Storch “shows elements that suggest” such a feature. Final Office Action, page 4, paragraph 2. In fact, Storch lacks any hint of such a feature.

The Examiner asserts on pages 3 – 4 of the Final Office Action (paper no. 12) that Storch “shows elements that suggest:

A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- determining a monetary value;
- allocating a portion of a ticket, the portion being based on the monetary value;
- outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket; and
- storing the ticket identifier and the portion identifier”

(indentation not in original)

In other words, the Examiner has asserted that the entire method of claim 1 is “suggested” by elements of Storch. The Examiner simultaneously concedes that “Storch lacks an explicit recitation” of *outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket*. Final Office Action, page 4, paragraph 2. The Examiner also asserts that this limitation is “suggested” by Storch. Final Office Action, page 4, paragraph 2. Thus, it is apparent that the Examiner’s use of “suggest” does not mean “to explicitly recite”. Appellants therefore understand this to be concession that no limitations of claim 1 are disclosed by or inherent in Storch, but are merely “suggested” by Storch.

From the unclear use of the term “suggest”, it is unclear what the Examiner believes that Storch does explicitly disclose. Nowhere else in any Office Action has the Examiner asserted what Storch does explicitly disclose.

Moreover, Appellants note that a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or *Group I*

otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Storch to yield what is “suggested” by Storch. The lack of any motivation to combine or modify is discussed below.

Despite the assertions in the Office Actions, Storch does not suggest *allocating a portion of a ticket*. Simply put, nothing in Storch appears to be *allocated*, much less *a portion of a ticket*. As described above, Storch generally describes various schemes for encoding information in bar codes, including representing integer and / or fractional numerical information in bar codes. Col. 4, lines 17 - 25; Col. 42, lines 23 – 25; Col. 70, lines 50 – 54.

Regarding lottery tickets, Storch discloses generally that the bar codes of Storch may be used on lottery tickets, e.g., to detect fraud. Col. 4, lines 58 – 61; Col. 67, lines 11 - 16; Col. 66, lines 46 - 52.

The Examiner has cited several portions of Storch as suggesting various limitations of the pending claims. However, the Examiner does not at all indicate which portions of Storch suggest which claim limitations. The cited portions do not at all suggest the claimed limitations. In fact, no part of Storch suggests *allocating a portion of a ticket*.

Applicants have categorized these cited portions of Storch as follows:

- (a) Bar Code Formats,
- (b) Lottery Ticket,
- (c) Processes for Reading Bar Codes, and
- (d) Hardware Diagram:

(a) Bar Code Formats

FIG. 1; FIG. 2; FIG. 28; FIG. 31; FIG. 32; FIG. 34; Col. 6, lines 26 – 48; Col. 8, lines 17 – 40; and Col. 70, lines 50 – 64.

Figures 1 and 2 illustrate bar code symbols coded in BCB to represent, respectively, ASCII characters and numerical information.

Fig. 28 illustrates a bi-directional code printed in the upper right and lower left quadrants of currency, which allows such codes to be read whether or not the currency is upside down.

Fig. 31 shows a general purpose BCB representation of a numerical message.

Fig. 32 shows a general purpose BCB representation of an alphanumeric message.

*Group I*

Fig. 34 shows an "AB switch" pattern in a bar code of a combination alphanumeric and numerical message.

Col. 6, lines 26 – 48 describe aspects of a coding feature, suitable for bar codes, which includes the use of end code elements and an even number of code elements between the end code elements.

Col. 8, lines 17 – 40 describe various types of information that may be stored by a bar code, including integer and fractional numerical information, signed numerical information, and two distinct portions of a message such as a numerator and a denominator.

Col. 70, lines 50 – 64 describes a format for encoding a positive or negative fraction in a bar code.

(b) Lottery Ticket

FIG. 22; and Col. 13, lines 27 – 30.

FIG. 22 and Col. 13, lines 27 – 30 describe a lottery ticket with repeated actual BCB bar code symbology.

(c) Processes for Reading Bar Codes

FIG. 24; FIG. 25; and Col 132, lines 33 – 50.

FIG. 24 is a flow chart of a method for detecting whether a bar code is BCB, and for detecting whether that BCB bar code has an error in it.

Fig. 25 is a flow chart illustrating a method for bar code error correction.

Col. 132, lines 33 – 50 describes a specific format of BCB coding for Random ID numbers, using currency as an example.

(d) Hardware Diagram

FIG. 29; FIG. 50.

FIG. 29 shows a system with a telephone incorporating an associated bar code reader. The telephone accesses a computer 306. The computer may establish an interactive system and *Group I*

provide audio prompts via the telephone to enter a serial number on currency and other objects, etc. The system may also provide audio confirmation and/or other information.

Fig. 50 shows a system including a computer which may be used to carry out the processing, storing, bar code and machine reading, signal encoding, bar code printing, and communicating with remote systems and terminals of Storch's system.

None of the cited Bar Code Formats, Lottery Ticket, Processes for Reading Bar Codes, or Hardware Diagram of Storch disclose or suggest:

*allocating a portion of a ticket*  
much less

*allocating a portion of a ticket, the portion being based on the monetary value.*

Thus, in summary, the Examiner has not shown that the references, alone or in combination, suggest *allocating a portion of a ticket*.

### **1.3.2. No showing that the references suggest *outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket***

The Examiner has not shown that the references, alone or in combination, suggest *outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket*. The closest the Examiner comes is a conclusory statement that Storch "shows elements that suggest" such a feature but "lacks an explicit recitation of" the feature, but Roberts "shows elements that suggest" such a feature. In fact, Storch lacks such any hint of such a feature. Final Office Action, page 4, paragraphs 2 – 3.

In fact, both Storch and Roberts lack any hint of such a feature.

The Examiner offers as evidence the following portions of Roberts: FIG. 2B, element 20b; Col. 4, lines 5 – 65; and Col. 6, lines 54 – 55.

FIG. 2B, element 20b of Roberts is ticket completion information printed on a ticket in human readable format. In FIG. 2B, it is represented as digits.

*Group I*

Col. 4, lines 5 – 65 of Roberts generally describes the printing of a lottery ticket, in particular the printing of additional information in addition to information pre-printed on the ticket. Subsequently, it may then be determined if the ticket has won.

Col. 6, lines 54 – 55 of Roberts states that ticket completion information necessary to provide a completed lottery ticket is the ticket completion information 20a (in bar code format) and 20b (in human readable format).

Simply put, whatever may be output in Roberts is not *a portion identifier that identifies an allocated portion of the ticket*. For example, the ticket completion information (Fig. 2B, element 20b) in human readable format “identifies the terminal 14 along with the date and the time of day the ticket was processed.” Col. 4, lines 51 – 53. Thus, this ticket completion information clearly has nothing to do with *an allocated portion of the ticket*, much less *a portion identifier that identifies an allocated portion of the ticket*.

Like Storch discussed above, nothing in Roberts suggests:

*allocating a portion of a ticket, the portion being based on the monetary value.*

Therefore, nothing in Roberts can suggest *outputting ... a portion identifier that identifies the allocated portion of the ticket*.

Thus, in summary, the Examiner has not shown that the references, alone or in combination, suggest *outputting ... a portion identifier that identifies the allocated portion of the ticket*.

### **1.3.3. No showing that the references suggest storing the ticket identifier and the portion identifier**

The Examiner has not shown that the references, alone or in combination, suggest *storing the ticket identifier and the portion identifier [that identifies the allocated portion of the ticket]*. The closest the Examiner comes is a conclusory statement that Storch “shows elements that suggest” such a feature. Final Office Action, page 4, paragraph 2. In fact, Storch lacks any hint of such a feature.

As described in Section 1.3.1 above, the Examiner’s use of the phrase “shows elements that suggest” indicates that such a feature is not actually disclosed by or inherent in Storch, but is merely “suggested” by Storch.

*Group I*

Since, as described in Section 1.3.1 above, the Examiner has not shown that Storch or any reference of record suggests *allocating a portion of a ticket*, the references cannot suggest *storing a portion identifier that identifies the allocated portion of the ticket*.

#### 1.3.4. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 21 USPQ2d 1941 (Fed. Cir. 1992). Furthermore, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed. In re Kotzab, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

A finding of obviousness requires that the art contain something to suggest the desirability of the proposed combination. In re Grabiak, 769 F.2d 729, 732 (Fed. Cir. 1985). In the absence of such a showing, there is inadequate support for the position that the proposed modification would *prima facie* have been obvious. Id. The absence of such a suggestion to combine is dispositive in an obviousness determination. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1579 (Fed. Cir. 1997).

When the art in question is relatively simple, the opportunity to judge by hindsight is particularly tempting. Consequently, the tests of whether to combine references need to be applied rigorously. McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1352 (Fed. Cir. 2001). In each case the factual inquiry whether to combine references must be thorough and searching. Id., at 1352 - 53.

The Examiner has provided two motivations to combine the Storch, Roberts and The Economist references.  
Group I

First, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Storch because “such combination would have provided means for ‘[sending] … ticket completion information necessary to provide a completed lottery ticket … ’ (See Roberts (col. 6, ll. 54 – 55)).” Final Office Action, page 4, last paragraph.

Second, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Storch because “such combination would have provided means for ‘determining a monetary value … ’ (See The Economist (p. 1)).” Final Office Action, page 5, paragraph 3.

Both motivations fail for three reasons:

- (a) neither motivation would actually have prompted one to make the proposed combination;
- (b) neither combination would in any way further the proposed motivation; and
- (c) neither combination has anything to do with the embodiment of claim 1, as discussed above in Sections 1.3.1, 1.3.2 and 1.3.3.

With respect to reason (a), the first motivation, “providing a means for sending ticket completion information”, would not cause one to seek out optimal encoding of information in bar codes, much less the particular method of Storch. Even if the bar codes on the tickets of Roberts were encoding using methods of Storch, this has nothing to do with sending ticket completion information. At best it involves *what* the ticket completion information is: a particular kind of bar code.

Further with respect to reason (a), the second motivation, “providing a means for determining a monetary value”, would not cause one to seek out optimal encoding of information in bar codes, much less the particular method of Storch. In fact, there is no way in which bar codes appear to fit with the system disclosed in The Economist.

With respect to reason (b), the first combination (Storch and Roberts) does not further the proposed motivation of “providing a means for sending ticket completion information”. The bar code formats of Storch, and the encoding and decoding techniques of Storch, do not “provide a means for sending” anything.

Further with respect to reason (b), the second combination (Storch and The Economist) does not further the proposed motivation of “providing a means for determining a monetary *Group I*

value". Whatever means in The Economist for determining a monetary value would seem to be unaltered by the bar code formats of Storch, and the encoding and decoding techniques of Storch.

With respect to reason (c), the first and second combinations (as well as any combination of the references) have nothing to do with the embodiment of claim 1. Further, as described above, any such combination would still lack several features of claim 1, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 1.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

### 1.3.5. Nonanalogous References

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

Storch is directed to optimal coding which may be used for counterfeit detection and / or deterrence. Col. 4, lines 10 – 11.

In Roberts, if non-completed tickets are stolen, the thief will not be in possession of completed lottery tickets. Col. 2, lines 29 - 31.

In contrast, The Economist is directed to a method to eliminate the need for change in transactions. Lines 1 – 3.

None of the above references is in the field of the applicant's endeavor, and none of the above references is reasonably pertinent to the particular problem addressed by the embodiment of the claims of the Group, or of any other claim.

*Group I*

#### **1.4. The Claims of Group I are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

##### **1.4.1. The references do not suggest *allocating a portion of a ticket, the portion being based on the monetary value***

Despite the assertions in the Office Actions, Storch does not suggest *allocating a portion of a ticket*. Simply put, nothing in Storch appears to be *allocated*, much less *a portion of a ticket*. As described above, Storch generally describes various schemes for encoding information in bar codes, including representing integer and / or fractional numerical information in bar codes. Col. 4, lines 17 - 25; Col. 42, lines 23 – 25; Col. 70, lines 50 – 54.

Regarding lottery tickets, Storch discloses generally that the bar codes of Storch may be used on lottery tickets, e.g., to detect fraud. Col. 4, lines 58 – 61; Col. 67, lines 11 - 16; Col. 66, lines 46 - 52.

Roberts likewise does not suggest *allocating a portion of a ticket*. Even if one argued that the blank region of the disclosed lottery ticket was a *portion of a ticket* that was *allocated*, that portion is not in any way *based on a monetary value [that was determined]*.

The Economist has nothing at all to do with tickets, much less allocating portions thereof.

##### **1.4.2. The references do not suggest *outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket***

Simply put, whatever may be output in any reference of record is not *a portion identifier that identifies an allocated portion of the ticket*.

As discussed in Section 1.4.1 above, no reference or combination thereof discloses *allocating a portion of a ticket, the portion being based on the monetary value*.

Therefore, nothing in any reference, alone or in combination, can suggest *outputting ... a portion identifier that identifies the allocated portion of the ticket*.

*Group I*

#### **1.4.3. The references do not suggest *storing the ticket identifier and the portion identifier***

As discussed in Section 1.4.1 above, no reference or combination thereof discloses *allocating a portion of a ticket, the portion being based on the monetary value.*

Therefore, nothing in any reference, alone or in combination, can suggest *storing a portion identifier that identifies the allocated portion of the ticket.*

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group I, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group I, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 1.2 "Advantages of Independent Claim 1". Accordingly, for at least those reasons, the claims of Group I are patentable in view of the cited references.

## 2. Group II

### SEPARATE ARGUMENT OF PATENTABILITY

Group II includes dependent claims **2 and 7**. Dependent claim **2** depends from independent claim **1**, and dependent claim **7** depends from independent claim **6**. Both independent claims are discussed above in Group I. Accordingly, all arguments above with respect to Group I are equally applicable to Group II, and the claims of Group II are patentable at least for the same reasons given above for Group I. Moreover, additional arguments are provided below for the patentability of the claims of Group II, regardless of the patentability of the claims of Group I.

As discussed below, the rejection of the claims of Group II is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group II. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group II can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group II obvious.

#### 2.1. Dependent Claims 2 and 7

Dependent claim **2** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value based on an amount of change due for a purchase, and allocating a portion of a ticket. The portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket are output, and the ticket identifier and the portion identifier are stored.

*Group II*

Dependent claim 7 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 2.

For brevity, the discussion below refers to method claim 2, but the arguments are likewise applicable to apparatus claim 7.

## 2.2. Advantages of Dependent Claim 2

In addition to the advantages discussed above in Section 1.2 with respect to Group I, the embodiment of claim 2 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

Because *the portion of the ticket which is allocated is based on a monetary value*, and this *monetary value is based on an amount of change due for a purchase*, the portion of the ticket that is allocated (and thus the value of the fractional lottery ticket) is tied to an amount of change due for a purchase. In fact, the portion of the ticket that is allocated could be purchased in lieu of change due from a purchase.

There are numerous advantages to providing a fractional lottery ticket in exchange for change due. For example, dispensing and collecting coins is costly and burdensome. Furthermore, many customers consider coins to be dirty, and would prefer not to handle them. Thus, many customers will find the exchange of change due for a fractional lottery ticket to be very desirable. Application, page 3, lines 15 – 22. Accordingly, many customers will willingly purchase a fractional lottery ticket in exchange for change due.

An amount paid (e.g., change due) could, for instance, dictate the size of the portion of the ticket, and thus the corresponding value of the ticket if it is a winning ticket. For example, for \$0.26, the customer may be sold a 26% share of a \$1 lottery ticket. Application, page 3, lines 11 - 14. Further, because the *allocated portion* of the ticket is *based on a monetary value*, any corresponding ticket winnings, which are likewise based on the *allocated portion*, are likewise related to the *monetary value*. For instance, one could require that the benefit of higher potential winnings (from greater portions of tickets) will require higher monetary values.

*Group II*

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### **2.3. No Prima Facie Showing of Unpatentability of the Claims of Group II**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a *prima facie* case of obviousness of any claim of the Group.

#### **2.3.1. No showing that the references suggest *an allocated portion [of a ticket] is based on a monetary value, which is based on an amount of change due for a purchase***

As discussed in Section 1.3.1 above, there is no showing that the references suggest *allocating a portion of a ticket*. Thus, there cannot have been any showing of *an allocated portion [of a ticket] which is based on a monetary value, which is based on an amount of change due for a purchase*.

On page 5 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but The Economist "shows elements that suggest 'determining a monetary value based on an amount of change due for a purchase'".

Though a goal of the system described in The Economist is to eliminate change in transactions, it does not appear that anything in this system is *based on an amount of change due*, much less a *monetary value*. The price in this system is rounded up or down based on two numbers between 1 and 100, chosen by the shopper and cash register respectively. Thus, if this rounded price is considered a monetary value which is determined, it is based on three values only: the original (unrounded) purchase price, the number chosen by the shopper, and the number chosen by the cash register. In other words, the rounded price in The Economist is not based on *an amount of change due for a purchase*.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify *Group II*.

a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly “suggested” by The Economist. The lack of any motivation to combine or modify the references is discussed below.

### **2.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 1.3.4 above, the Examiner has asserted with respect to claim 2 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Storch because “such combination would have provided means for ‘determining a monetary value …’ (See The Economist (p. 1)).” Final Office Action, page 5, last paragraph.

However, the combination of The Economist and Storch has nothing to do with the embodiment of claim 2, as discussed above in Sections 2.3.1.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 2. Since The Economist has nothing to do with tickets, much less allocating portions of tickets. Similarly, Storch and Roberts have nothing to do with change due for a purchase, much less allocating portions of tickets, in which the allocated portion is *based on a monetary value, which is based on an amount of change due for a purchase.*

Further, as described above, any such combination would still lack several features of claim 2, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 2.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

### **2.4. The Claims of Group II are Allowable Over the Cited References**

*Group II*

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

**2.4.1. The references do not suggest *an allocated portion [of a ticket] is based on a monetary value, which is based on an amount of change due for a purchase***

As described in Section 1.4.1 above, no reference discloses *allocating a portion of a ticket, the portion being based on the monetary value*. Further, no reference suggests that such a monetary value is *based on an amount of change due for a purchase*.

Neither Storch nor Roberts mention *change due for a purchase*. The Economist seeks to eliminate change due by randomly rounding prices up or down. Thus, no reference of record suggests using *change due for a purchase* for anything, much less for *an allocated portion of a ticket*.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group II, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group II, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 2.2 "Advantages of Dependent Claim 2". Accordingly, for at least those reasons, the claims of Group II are patentable in view of the cited references.

*Group II*

### 3. Group III

#### SEPARATE ARGUMENT OF PATENTABILITY

Group III includes dependent claims **3 and 8**. Dependent claim **3** depends from independent claim **1**, and dependent claim **8** depends from independent claim **6**. Both independent claims are discussed above in Group I. Accordingly, all arguments above with respect to Group I are equally applicable to Group III, and the claims of Group III are patentable at least for the same reasons given above for Group I. Moreover, additional arguments are provided below for the patentability of the claims of Group III, regardless of the patentability of the claims of Group I.

##### 3.1. Dependent Claim 3 and 8

Dependent claim **3** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and selecting a ticket from a plurality of tickets. A portion of the ticket is allocated, and the portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket are output, and the ticket identifier and the portion identifier are stored.

Dependent claim **8** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **3**.

For brevity, the discussion below refers to method claim **3**, but the arguments are likewise applicable to apparatus claim **8**.

##### 3.2. Advantages of Dependent Claims 3 and 8

The embodiments of claims **3 and 8** provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

In addition to the advantages discussed above with respect to Group I, by *selecting the ticket from a plurality of tickets*, the ticket (of which a portion is allocated) may be chosen in a *Group III*

manner which confers an advantage. For example, it may be desirable to allocate a portion from a particular ticket of a group of possible tickets. Similarly, it may be desirable to avoid allocating a portion from a particular ticket of a group of possible tickets. Several reasons for selecting a ticket are discussed in the present Application, and some methods for selecting are recited in dependent claims **4, 5, 9 and 10**.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### 3.3. No Prima Facie Showing of Unpatentability of the Claims of Group III

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

#### 3.3.1. No showing that the references suggest *selecting the ticket from a plurality of tickets*

On page 6 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts "shows elements that suggest 'selecting the ticket from a plurality of tickets'" at Figs. 6A and 6B.

Figs. 6A and 6B show fan folded non-completed lottery tickets stored in a terminal. The fan-folded stack of ticket stock may be used as a printable medium.

Clearly, this portion of Roberts has nothing to do with selecting anything.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly "suggested" by Roberts.

The lack of any motivation to combine or modify the references is discussed below.

*Group III*

### 3.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 1.3.4 above, the Examiner has asserted with respect to claim 3 that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Storch because “such combination would have provided means for ‘dispensing completed lottery tickets from a vending machine.’ (See Roberts (col. 2, ll. 59 - 60)).” Final Office Action, page 6, paragraph 4.

This motivation fails for three reasons:

- (a) this motivation would actually have prompted one to make the proposed combination;
- (b) the combination would in any way further the proposed motivation; and
- (c) the combination has nothing to do with the embodiment of claim 3, as discussed above in Section 3.3.1.

With respect to reason (a), the motivation, “providing a means for dispensing completed lottery tickets from a vending machine”, would not cause one to seek out optimal encoding of information in bar codes, much less the particular method of Storch. Even if the bar codes on the tickets of Roberts were encoding using methods of Storch, this has nothing to do with dispensing completed lottery tickets from a vending machine. At best it involves *what* is on the dispensed tickets: a particular kind of bar code.

With respect to reason (b), the combination (Storch and Roberts) does not further the proposed motivation of “providing a means for dispensing completed lottery tickets from a vending machine”. The bar code formats of Storch, and the encoding and decoding techniques of Storch, do not “provide a means for dispensing” anything.

With respect to reason (c), the combination (as well as any combination of the references) has nothing to do with the embodiment of claim 3. Further, as described above, any such combination would still lack several features of claim 3, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 3.

*Group III*

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

### **3.4. The Claims of Group III are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

#### **3.4.1. The references do not suggest *selecting the ticket from a plurality of tickets***

Neither Storch nor The Economist mention *selecting a ticket* in any way. In Roberts, even if one could say that the customer selects a ticket (Col. 7, lines 47 – 48), the customer is not the entity which would perform any of the other steps of claim 3. Thus, Roberts cannot suggest the claimed step when the claim is considered as a whole.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group III, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group III, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 3.2 "Advantages of Dependent Claim 3". Accordingly, for at least those reasons, the claims of Group III are patentable in view of the cited references.

*Group III*

#### 4. Group IV

#### SEPARATE ARGUMENT OF PATENTABILITY

Group IV includes dependent claims **4 and 9**. Dependent claim 4 depends from dependent claim 3, and dependent claim 9 depends from independent claim 8. Both parent claims are discussed above in Group III. Accordingly, all arguments above with respect to Group III are equally applicable to Group IV, and the claims of Group IV are patentable at least for the same reasons given above for Group III. Moreover, additional arguments are provided below for the patentability of the claims of Group IV, regardless of the patentability of the claims of Group III.

##### 4.1. Dependent Claim 4 and 9

Dependent claim **4** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and selecting a ticket from a plurality of tickets. The selected ticket has an unallocated portion at least as great as the monetary value. A portion of the ticket is allocated, and the portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket are output, and the ticket identifier and the portion identifier are stored.

Dependent claim **9** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 4.

For brevity, the discussion below refers to method claim 4, but the arguments are likewise applicable to apparatus claim 9.

##### 4.2. Advantages of Dependent Claims 4 and 9

The embodiments of claims **4 and 9** provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

*Group IV*

In addition to the advantages discussed above with respect to Group III, by *selecting a ticket having an unallocated portion at least as great as the monetary value*, the selected ticket (of which a portion is allocated) has an unallocated portion which is equal to or greater than the monetary value. For example, given a monetary value of \$0.40, a ticket having an unallocated portion at least as great as \$0.40 is selected. Thus, in embodiments where the monetary value represents a price paid for an allocated portion of a ticket, the selected ticket has at least enough of an unallocated portion to supply the desired monetary amount.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

#### **4.3. No Prima Facie Showing of Unpatentability of the Claims of Group IV**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a *prima facie* case of obviousness of any claim of the Group.

##### **4.3.1. No showing that the references suggest *selecting a ticket having an unallocated portion at least as great as the monetary value***

On pages 6 - 7 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts "shows elements that suggest '*selecting a ticket having an unallocated portion at least as great as the monetary value*' " at Figs. 2A, 5 and 8A.

Figs. 2A, 5 and 8A show pre-printed non-completed lottery tickets.

Clearly, these portions of Roberts have nothing to do with selecting anything, much less *selecting a ticket having an unallocated portion at least as great as the monetary value*.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to *Group IV*

make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts. The lack of any motivation to combine or modify the references is discussed below.

#### **4.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 3.3.2 above, the Examiner has asserted with respect to claim 4 that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Storch because “such combination would have provided means for ‘dispensing completed lottery tickets from a vending machine.’ (See Roberts (col. 2, ll. 59 - 60)).” Final Office Action, page 7, paragraph 2.

This motivation fails for three reasons:

- (a) this motivation would actually have prompted one to make the proposed combination;
- (b) the combination would in any way further the proposed motivation; and
- (c) the combination has nothing to do with the embodiment of claim 4, as discussed above in Section 4.3.1.

Reasons (a) and (b) have been discussed in Section 3.3.2 above.

With respect to reason (c), the combination (as well as any combination of the references) has nothing to do with the embodiment of claim 4. Further, as described above, any such combination would still lack several features of claim 4, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 4.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

#### **4.4. The Claims of Group IV are Allowable Over the Cited References**

*Group IV*

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

**4.4.1. The references do not suggest *selecting a ticket having an unallocated portion at least as great as the monetary value***

Neither Storch nor The Economist mention *selecting a ticket* in any way. In Roberts, even if one could say that the customer selects a ticket (Col. 7, lines 47 – 48), the customer is not *selecting a ticket having an unallocated portion at least as great as the monetary value*. Thus, Roberts cannot suggest the claimed step.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group IV, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group IV, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 4.2 "Advantages of Dependent Claim 4". Accordingly, for at least those reasons, the claims of Group IV are patentable in view of the cited references.

*Group IV*

## 5. Group V

### SEPARATE ARGUMENT OF PATENTABILITY

Group V includes dependent claims **5 and 10**. Dependent claim **5** depends from dependent claim **3**, and dependent claim **10** depends from independent claim **8**. Both parent claims are discussed above in Group III. Accordingly, all arguments above with respect to Group III are equally applicable to Group V, and the claims of Group V are patentable at least for the same reasons given above for Group III. Moreover, additional arguments are provided below for the patentability of the claims of Group V, regardless of the patentability of the claims of Group III.

#### 5.1. Dependent Claim 5 and 10

Dependent claim **5** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value, and determining a set of tickets that each have an unallocated portion at least as great as the monetary value. A ticket is selected from the set of tickets which has a minimal unallocated portion. A portion of the selected ticket is allocated, and the portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket are output, and the ticket identifier and the portion identifier are stored.

Dependent claim **10** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **5**.

For brevity, the discussion below refers to method claim **5**, but the arguments are likewise applicable to apparatus claim **10**.

*Group V*

## 5.2. Advantages of Dependent Claims 5 and 10

The embodiments of claims **5 and 10** provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

In addition to the advantages discussed above with respect to Group III, by *determining a set of tickets that each have an unallocated portion at least as great as the monetary value; and*

*selecting a ticket from the set of tickets which has a minimal unallocated portion,* the selected ticket (of which a portion is allocated) has an unallocated portion which is equal to or greater than the monetary value. In fact, this selected ticket has the smallest unallocated portion of the set of tickets. Thus, a ticket is selected such that, after allocating a portion thereof, the remaining unallocated portion will be minimized. This helps minimizes the number of tickets with unallocated portions, and the unallocated portions of such tickets.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

## 5.3. No Prima Facie Showing of Unpatentability of the Claims of Group V

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

### 5.3.1. No showing that the references suggest *determining a set of tickets that each have an unallocated portion at least as great as the monetary value; and selecting a ticket from the set of tickets which has a minimal unallocated portion*

On pages 7 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts "shows elements that suggest 'determining a set of tickets

*Group V*

that each have an unallocated portion at least as great as the monetary value; and selecting a ticket from the set of tickets which has a minimal unallocated portion' " at Figs. 2A, 5 and 8A.

Figs. 2A, 5 and 8A show pre-printed non-completed lottery tickets.

Clearly, these portions of Roberts have nothing to do with selecting anything, much less *determining a set of tickets that each have an unallocated portion at least as great as the monetary value; and selecting a ticket from the set of tickets which has a minimal unallocated portion.*

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly "suggested" by Roberts.

The lack of any motivation to combine or modify the references is discussed below.

### 5.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described in Section 3.3.2 above, the Examiner has asserted with respect to claim 5 that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Storch because "such combination would have provided means for 'dispensing completed lottery tickets from a vending machine.' (See Roberts (col. 2, ll. 59 - 60))." Final Office Action, page 8, paragraph 1.

This motivation fails for three reasons:

- (a) this motivation would actually have prompted one to make the proposed combination;
- (b) the combination would in any way further the proposed motivation; and
- (c) the combination has nothing to do with the embodiment of claim 5, as discussed above in Section 5.3.1.

Reasons (a) and (b) have been discussed in Section 3.3.2 above.

*Group V*

With respect to reason (c), the combination (as well as any combination of the references) has nothing to do with the embodiment of claim 5. Further, as described above, any such combination would still lack several features of claim 5, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 5.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

#### **5.4. The Claims of Group V are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

##### **5.4.1. The references do not suggest *determining a set of tickets that each have an unallocated portion at least as great as the monetary value; and selecting a ticket from the set of tickets which has a minimal unallocated portion***

Neither Storch nor The Economist mention *selecting a ticket* in any way. In Roberts, even if one could say that the customer selects a ticket (Col. 7, lines 47 – 48), the customer is not *selecting a ticket from a set of tickets which has a minimal unallocated portion*. The customer likewise does not *determine a set of tickets that each have an unallocated portion at least as great as the monetary value*. Thus, Roberts cannot suggest the claimed feature.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group V, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group V, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 5.2 "Advantages of Dependent Claim 5". Accordingly, for at least those reasons, the claims of Group IV are patentable in view of the cited references.

*Group V*

## 6. Group VI

### SEPARATE ARGUMENT OF PATENTABILITY

Group VI includes independent claims **13 and 17**. Independent method claim **13** includes all of the limitations of dependent claim **2** (discussed in Group II above) and also includes all of the limitations of dependent claim **4** (discussed in Group IV above). Similarly, independent apparatus claim **17** includes all of the limitations of dependent claim **7** (discussed in Group II above) and also includes all of the limitations of dependent claim **9** (discussed in Group IV above).

Accordingly, all arguments above with respect to Groups II and IV are equally applicable to Group II, and the claims of Group VI are patentable at least for the same reasons given above for Group II and / or Group IV.

In addition, independent claims **13 and 17** includes the feature that *at least a portion of the selected ticket is allocated*.

#### 6.1. Independent Claims 13 and 17

Independent claim **13** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining an amount of change due for a purchase, and determining a monetary value based on the amount of change due.

A ticket is selected from a plurality of tickets. The selected ticket has an unallocated portion at least as great as the monetary value. At least a portion of the selected ticket is allocated. The portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket are output. The ticket identifier and the portion identifier are stored.

Independent claim **17** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **13**.

For brevity, the discussion below refers to method claim **13**, but the arguments are likewise applicable to apparatus claim **17**.

*Group VI*

## 6.2. Patentability of the Claims of Group VI

The claims of the Group include all of the limitations of the claims of Group II, and all of the limitations of the claims of Group IV. Accordingly, if either or both of Group II and Group IV are deemed patentable, then the claims of Group VI must be patentable.

However, since the claims of Group II and the claims of Group IV do not depend from one another, the claims of Group VI cannot stand or fall with either of those two groups. Thus, the present separate argument of patentability is appropriate.

## 7. Group VII

### SEPARATE ARGUMENT OF PATENTABILITY

Group VII includes dependent claims **14, 15, 18 and 19**. Dependent claims **14 and 15** depend from independent claim **13**, and dependent claims **18 and 19** depend from independent claim **17**. Both independent claims are discussed above in Group VI. Accordingly, all arguments above with respect to Group VI are equally applicable to Group VII, and the claims of Group VII are patentable at least for the same reasons given above for Group VI. Moreover, additional arguments are provided below for the patentability of the claims of Group VII, regardless of the patentability of the claims of Group VI.

As discussed below, the rejection of the claims of Group VII is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group VII. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group VII can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group VII obvious.

#### 7.1. Dependent Claims **14, 15, 18 and 19**

Dependent claim **14** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining an amount of change due for a purchase, and determining a monetary value based on the amount of change due by rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount. The monetary value is set equal to the rounded change amount.

*Group VII*

A ticket is selected from a plurality of tickets. The selected ticket has an unallocated portion at least as great as the monetary value. At least a portion of the selected ticket is allocated. The portion is based on the monetary value.

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket are output. The ticket identifier and the portion identifier are stored.

Dependent claim 15, which depends from claim 14, further limits claim 14 by rounding down the amount of change due.

Dependent claim 18 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 14.

Dependent claim 19 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 15.

For brevity, the discussion below refers to method claim 14, but the arguments are likewise applicable to claim 15 apparatus claims 18 and 19.

## 7.2. Advantages of Dependent Claim 14

In addition to the advantages discussed above with respect to Group VI, the embodiment of claim 14 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

*Because the amount of change due is rounded to a predetermined multiple, and the monetary value is set equal to the rounded change amount, the "price" of a portion of a ticket may be set to different rounded amounts. For example, a customer may have \$0.62 in change from a purchase, and use that change to acquire a fractional lottery ticket. The fractional lottery ticket may be based on an allocated \$0.60 (\$0.62 rounded down to the nearest nickel) portion of a lottery ticket. Of course, the monetary amount may be rounded down to other multiples, such as to the nearest dime, quarter or dollar, and that rounded amount would define the allocated portion of a lottery ticket. The difference between the change due and the rounded-down amount upon which the fractional lottery ticket is based may, for example, be kept as a service fee by the seller of the fractional lottery ticket. Application, page 13, line 18 - page 14, line 2.*  
*Group VII*

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### 7.3. No Prima Facie Showing of Unpatentability of the Claims of Group VII

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a *prima facie* case of obviousness of any claim of the Group.

#### 7.3.1. No showing that the references suggest *rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and setting the monetary value equal to the rounded change amount*

On page 10 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but The Economist "shows elements that suggest 'rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and setting the monetary value equal to the rounded change amount'".

Though a goal of the system described in The Economist is to eliminate change in transactions, no *monetary amount* in this system is *set equal to the rounded change amount* because there is no *rounding the amount of change due*, much less *rounding the amount of change due to a predetermined multiple*. The price (not the change amount) in the system of The Economist is rounded up or down based on two numbers between 1 and 100. In other words, the change due is always zero, since the goal of The Economist is to eliminate change in transactions.

Further, as discussed above, a reference only "suggests" a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the "suggested" limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly "suggested" by *Group VII*.

The Economist. The lack of any motivation to combine or modify the references is discussed below.

### 7.3.2. No showing of a proper motivation to combine the references

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described above, the Examiner has asserted with respect to claim 14 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Storch because “such combination would have provided means for ‘determining a monetary value ...’ (See The Economist (p. 1)).” Final Office Action, page 11, paragraph 1.

However, the combination of The Economist and Storch has nothing to do with the embodiment of claim 14, as discussed above in Sections 7.3.1.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 14. Since The Economist has nothing to do with rounding an amount of change due, much less *rounding the amount of change due to a predetermined multiple*. Similarly, Storch and Roberts have nothing to do with an amount of change due for a purchase, much less *rounding the amount of change due to a predetermined multiple*.

Further, as described above, any such combination would still lack several features of claim 14, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 14.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

### 7.4. The Claims of Group VII are Allowable Over the Cited References

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

*Group VII*

**7.4.1. The references do not suggest rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and setting the monetary value equal to the rounded change amount**

Neither Storch nor Roberts mention *change due for a purchase*. As discussed in Section 7.3.2 above, The Economist seeks to eliminate change due by randomly rounding prices (not amounts of change) up or down. Thus, no reference of record suggests using *rounding an amount of change due*, much less *rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and setting the monetary value equal to the rounded change amount*.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group VII, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group VII, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 7.2 "Advantages of Dependent Claim 14". Accordingly, for at least those reasons, the claims of Group VII are patentable in view of the cited references.

*Group VII*

## 8. Group VIII

### SEPARATE ARGUMENT OF PATENTABILITY

Group VII includes dependent claims **16 and 20**. Dependent claim **16** depends from independent claim **13**, and dependent claim **20** depends from independent claim **17**. Both independent claims are discussed above in Group VI. Accordingly, all arguments above with respect to Group VI are equally applicable to Group VIII, and the claims of Group VIII are patentable at least for the same reasons given above for Group VI. Moreover, additional arguments are provided below for the patentability of the claims of Group VIII, regardless of the patentability of the claims of Group VI.

As discussed below, the rejection of the claims of Group VIII is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group VIII. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group VIII can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group VIII obvious.

#### 8.1. Dependent Claims 16 and 20

Dependent claim **16** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining an amount of change due for a purchase, and determining a monetary value based on the amount of change due. An offer to exchange a fractional lottery ticket for change due is output.

A ticket is selected from a plurality of tickets. The selected ticket has an unallocated portion at least as great as the monetary value. At least a portion of the selected ticket is allocated. The portion is based on the monetary value.

*Group VIII*

A ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket are output. The ticket identifier and the portion identifier are stored.

Dependent claim 20 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 16.

For brevity, the discussion below refers to method claim 16, but the arguments are likewise applicable to apparatus claim 20.

### **8.2. Advantages of Dependent Claim 16**

In addition to the advantages discussed above with respect to Group VI, the embodiment of claim 16 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

Because *an offer to exchange a fractional lottery ticket for change due is output*, a customer may be informed of the opportunity to exchange his *change due* (which is typically unwanted) for a *fractional lottery ticket* (which is often highly desirable to certain people). Since the offer is for something (*change due*) that is frequently unwanted, the offer is likely to be accepted. Thus, increased sales of tickets can result.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### **8.3. No Prima Facie Showing of Unpatentability of the Claims of Group VIII**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

*Group VIII*

### **8.3.1. No showing that the references suggest outputting an offer to exchange a fractional lottery ticket for change due**

On page 12 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but The Economist “shows elements that suggest ‘*outputting an offer to exchange a fractional lottery ticket for change due*’ ”.

Though a goal of the system described in The Economist is to eliminate change in transactions, nothing is given in exchange for *change due*, much less a *fractional lottery ticket*. Thus there could not be *an offer to exchange* anything for *change due*.

In fact, The Economist teaches away from the embodiment of claim 16.

The Economist discloses that, in the long run, shoppers do not give up or forgo change. The system is designed so that “both parties will get a fair deal in the long run”. Lines 9 - 10. Thus, in the long run, there is no net payment on the part of the shopper to the merchant.

By contrast, in the embodiment of claim 16, the customer can forgo his change, and can receive something the customer perceives as comparable, such as a *fractional lottery ticket*.

Since The Economist does not deal with a customer exchanging his change due, that reference cannot provide a motivation to combine or modify references in a manner which renders the embodiment of claim 16 obvious.

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of The Economist to yield what is purportedly “suggested” by The Economist. The lack of any motivation to combine or modify the references is discussed below.

### **8.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

In addition to the deficiencies described above, the Examiner has asserted with respect to claim 16 that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Storch because “such combination would have provided means for ‘determining a monetary value . . .’ (See The Economist (p. 1)).” Final Office Action, page 12, paragraph 4.

However, the combination of The Economist and Storch has nothing to do with the embodiment of claim 16, as discussed above in Sections 8.3.1.

The proposed combination (as well as any combination of the references) has nothing to do with the embodiment of claim 16. Since The Economist has nothing to do with giving anything in exchange for *change due*, there could not be *an offer to exchange anything for change due*. Similarly, Storch and Roberts have nothing to do with an amount of change due for a purchase, much less *an offer to exchange anything for change due*.

Further, as described above, any such combination would still lack several features of claim 16, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 16.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

#### 8.4. The Claims of Group VIII are Allowable Over the Cited References

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

##### 8.4.1. The references do not suggest *outputting an offer to exchange a fractional lottery ticket for change due*

Neither Storch nor Roberts mention *change due for a purchase*. As discussed in Section 8.3.2 above, The Economist does not provide or offer anything in exchange for *change due*.

Similarly, no reference of record suggests *outputting any sort of offer*.

Similarly, no reference of record suggests *fractional lottery tickets*.

*Group VIII*

Thus, no reference of record suggests *outputting an offer to exchange a fractional lottery ticket for change due.*

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group VIII, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group VIII, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 8.2 "Advantages of Dependent Claim 16". Accordingly, for at least those reasons, the claims of Group VIII are patentable in view of the cited references.

*Group VIII*

## 9. Group IX

### SEPARATE ARGUMENT OF PATENTABILITY

Group IX includes independent claims **21, 22, 23 and 24**.

As discussed below, the rejection of the claims of Group IX is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group IX. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group IX can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group IX obvious.

#### 9.1. Independent Claims 21, 22, 23 and 24

Independent claim **21** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises receiving a ticket identifier that identifies a ticket and a portion identifier that identifies an allocated portion of the ticket. A prize value of the ticket is determined, and a portion of the prize value based on the allocated portion of the ticket is also determined.

Independent claim **22** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **21**.

Independent claim **23** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises determining a monetary value. At least a portion of a ticket is allocated, and this portion being based on the monetary value. A prize value of the ticket is determined; a portion of the prize value based on the allocated portion of the ticket is provided.

*Group IX*

Independent claim 24 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 23.

For brevity, the discussion below refers to method claim 21, but the arguments are likewise applicable to claims 22, 23 and 24.

### **9.2. Advantages of Independent Claim 21**

The embodiment of claim 21 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

*By determining a prize value of the ticket, and because a portion of the prize value is based on the allocated portion of the ticket, portions of prizes can be allocated to, e.g., holders of fractional lottery tickets. Thus, ticket holders can receive prize amounts based on allocated portions of tickets, thereby receiving comparable awards for holding comparable allocated portions of tickets. The advantages of fractional lottery tickets are described in the present application and parent applications.*

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### **9.3. No Prima Facie Showing of Unpatentability of the Claims of Group IX**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

#### **9.3.1. No showing that the references suggest *a portion of the prize value is based on the allocated portion of the ticket***

*Group IX*

The Examiner has not shown that the references, alone or in combination, suggest *a portion of the prize value is based on the allocated portion of the ticket*.

On page 13 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts “shows elements that suggest ‘determining a portion of the prize value based on the allocated portion of the ticket’ ” at FIG. 2B element 20b and col. 4, lines 5 - 65.

However, FIG. 2B, element 20b of Roberts is ticket completion information printed on a ticket in human readable format. In FIG. 2B, it is represented as digits.

Col. 4, lines 5 – 65 of Roberts generally describes the printing of a lottery ticket, in particular the printing of additional information in addition to information pre-printed on the ticket. Subsequently, it may then be determined if the ticket has won.

Nothing in Roberts suggests that *portions of tickets are allocated*. Therefore, nothing in Roberts can suggest that anything is *based on the allocated portion of the ticket*. This has been discussed above, for example in Sections 1.3.1 and 1.4.1.

Similarly, nothing in Roberts suggests that any *portion of a prize value* is considered for any reason, much less that *a portion of the prize value is based on the allocated portion of the ticket*.

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts. The lack of any motivation to combine or modify the references is discussed below.

### **9.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

The Examiner has provided two motivations to combine the Storch, Roberts and The Economist references.

First, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined Roberts with Storch because “such combination would have provided means for ‘[sending] … ticket completion information necessary to provide a completed lottery ticket …’ (See Roberts (col. 6, ll. 54 – 55)).” Final Office Action, page 14, paragraph 1.

Second, it is asserted that one of ordinary skill in the art at the time the invention was made would have combined The Economist with Storch because “such combination would have provided means for ‘determining a monetary value …’ (See The Economist (p. 1)).” Final Office Action, page 5, paragraph 3.

Both motivations fail for three reasons:

- (a) neither motivation would actually have prompted one to make the proposed combination;
- (b) neither combination would in any way further the proposed motivation; and
- (c) neither combination has anything to do with the embodiment of claim 21, as discussed above in Sections 9.3.1.

With respect to reason (a), the first motivation, “providing a means for sending ticket completion information”, would not cause one to seek out optimal encoding of information in bar codes, much less the particular method of Storch. Even if the bar codes on the tickets of Roberts were encoding using methods of Storch, this has nothing to do with sending ticket completion information. At best it involves *what* the ticket completion information is: a particular kind of bar code.

Further with respect to reason (a), the second motivation, “providing a means for determining a monetary value”, would not cause one to seek out optimal encoding of information in bar codes, much less the particular method of Storch. In fact, there is no way in which bar codes appear to fit with the system disclosed in The Economist.

With respect to reason (b), the first combination (Storch and Roberts) does not further the proposed motivation of “providing a means for sending ticket completion information”. The bar code formats of Storch, and the encoding and decoding techniques of Storch, do not “provide a means for sending” anything.

*Group IX*

Further with respect to reason (b), the second combination (Storch and The Economist) does not further the proposed motivation of "providing a means for determining a monetary value". Whatever means in The Economist for determining a monetary value would seem to be unaltered by the bar code formats of Storch, and the encoding and decoding techniques of Storch.

With respect to reason (c), the first and second combinations (as well as any combination of the references) have nothing to do with the embodiment of claim 21. Further, as described above, any such combination would still lack several features of claim 21, and these features have significant advantages, also as explained above. Further, any such combination would not solve any the problems addressed by the embodiment of claim 21.

Thus the Examiner has not shown a motivation in the prior art of record to modify or combine the references in any manner that renders the claims of the Group obvious.

### 9.3.3. Nonanalogous References

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. In re Oetiker, 977 F.2d 1443, 1447 (Fed. Cir. 1992).

Storch is directed to optimal coding which may be used for counterfeit detection and / or deterrence. Col. 4, lines 10 – 11.

In Roberts, if non-completed tickets are stolen, the thief will not be in possession of completed lottery tickets. Col. 2, lines 29 - 31.

In contrast, The Economist is directed to a method to eliminate the need for change in transactions. Lines 1 – 3.

None of the above references is in the field of the applicant's endeavor, and none of the above references is reasonably pertinent to the particular problem addressed by the embodiment of the claims of the Group, or of any other claim.

## 9.4. The Claims of Group I are Allowable Over the Cited References

*Group IX*

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

**9.4.1. The references do not suggest that *a portion of the prize value is based on the allocated portion of the ticket***

Despite the assertions in the Office Actions, Storch does not suggest that *a portion of the prize value is based on the allocated portion of the ticket*. Simply put, in Storch there are no prize values at all, and no *allocated portions of tickets*, much less that *a portion of the prize value is based on the allocated portion of the ticket*.

Regarding lottery tickets, Storch discloses generally that the bar codes of Storch may be used on lottery tickets, e.g., to detect fraud. Col. 4, lines 58 – 61; Col. 67, lines 11 - 16; Col. 66, lines 46 - 52.

Roberts likewise does not suggest *allocated portions of tickets*. Even if one argued that the blank region of the disclosed lottery ticket was a *portion of a ticket* that was *allocated*, there is no *portion of the prize value* that is based on *such a portion of a ticket*.

The Economist has nothing at all to do with tickets or prize values, much less portions thereof.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group IX, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group IX, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 9.2 "Advantages of Independent Claim 21". Accordingly, for at least those reasons, the claims of Group IX are patentable in view of the cited references.

*Group IX*

## 10. Group X

### SEPARATE ARGUMENT OF PATENTABILITY

Group X includes independent claims **25, 28, 31 and 34**.

As discussed below, the rejection of the claims of Group X is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group X. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group X can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group X obvious.

#### 10.1. Independent Claims 25 and 31

Independent claim **25** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises maintaining a supply of tickets. Each ticket has an unallocated portion thereof. An additional ticket is acquired.

Dependent claim **28** depends from claim **25** and further recites that a predetermined number of additional tickets are acquired.

Independent claim **31** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **25**.

Dependent claim **34** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **28**.

For brevity, the discussion below refers to method claim **25**, but the arguments are likewise applicable to claims **28, 31 and 34**.

*Group X*

## 10.2. Advantages of Independent Claim 25

The embodiment of claim 25 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

By *maintaining a supply of tickets*, in which *each ticket has an unallocated portion thereof* portions of tickets may be allocated to meet various goals, such as the creation of fractional lottery tickets.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

## 10.3. No Prima Facie Showing of Unpatentability of the Claims of Group X

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

### 10.3.1. No showing that the references suggest that *each ticket has an unallocated portion thereof*

The Examiner has not shown that the references, alone or in combination, suggest that *each ticket has an unallocated portion thereof*.

On page 16 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts "shows elements that suggest" such a feature at FIGs. 1, 2A, 5, 6 and 6A.

FIG. 1 is a block diagram of a lottery system.

FIGS. 2A and 5 show non-completed lottery tickets.

FIGs. 6A and 6B show fan folded non-completed lottery tickets.

There is no FIG. 6 in Roberts.

*Group X*

Nothing in Roberts suggests that *portions of tickets are allocated*. Therefore, nothing in Roberts can suggest that *each ticket has an unallocated portion thereof*. This has been discussed above, for example in Sections 1.3.1 and 1.4.1.

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts.

The lack of any motivation to combine or modify the references is discussed below.

#### **10.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

The arguments of Section 9.3.2 are reiterated here.

#### **10.3.3. Nonanalogous References**

None of the references is in the field of the applicant's endeavor, and none of the above references is reasonably pertinent to the particular problem addressed by the embodiment of the claims of the Group, or of any other claim.

The arguments of Section 9.3.3 are reiterated here.

### **10.4. The Claims of Group X are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

*Group X*

**10.4.1. The references do not suggest that *each ticket has an unallocated portion thereof***

Despite the assertions in the Office Actions, Storch does not suggest that *each ticket has an unallocated portion thereof*. Simply put, in Storch there are no portions of tickets at all, and no *allocated portions of tickets*, much less that *each ticket has an unallocated portion thereof*.

Regarding lottery tickets, Storch discloses generally that the bar codes of Storch may be used on lottery tickets, e.g., to detect fraud. Col. 4, lines 58 – 61; Col. 67, lines 11 - 16; Col. 66, lines 46 - 52.

Nothing in Roberts suggests that *portions of tickets are allocated*. Therefore, nothing in Roberts can suggest that *each ticket has an unallocated portion thereof*. This has been discussed above, for example in Sections 1.3.1 and 1.4.1.

The Economist has nothing at all to do with tickets, much less unallocated portions thereof.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group X, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group X, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 10.2 "Advantages of Independent Claim 21". Accordingly, for at least those reasons, the claims of Group X are patentable in view of the cited references.

*Group X*

## 11. Group XI

### SEPARATE ARGUMENT OF PATENTABILITY

Group III includes dependent claims **26, 27, 32 and 33**. Dependent claims **26 and 27** depend from independent claim **25**, and dependent claims **32 and 33** depend from independent claim **31**. Both independent claims are discussed above in Group X. Accordingly, all arguments above with respect to Group X are equally applicable to Group XI, and the claims of Group XI are patentable at least for the same reasons given above for Group X. Moreover, additional arguments are provided below for the patentability of the claims of Group XI, regardless of the patentability of the claims of Group X.

#### 11.1. Dependent Claim 26, 27, 32 and 33

Dependent claim **26** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises maintaining a supply of tickets. Each ticket has an unallocated portion thereof. A number of tickets having an unallocated portion that is above a first predetermined threshold is counted. If the number of tickets having an unallocated portion that is above the first predetermined threshold is below a second predetermined threshold, then an additional ticket is acquired.

Dependent claim **27** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises maintaining a supply of tickets. Each ticket has an unallocated portion thereof.

An indication of a requested portion is received. A number of tickets having an unallocated portion that is above the requested portion is counted. If the number of tickets having unallocated portion that is above the requested portion is below a predetermined threshold, then an additional ticket is acquired.

Dependent claim **32** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **26**.

Dependent claim **33** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **27**.

*Group XI*

For brevity, the discussion below refers to method claims **26 and 27**, but the arguments are likewise applicable to apparatus claim **32 and 33**.

### **11.2. Advantages of Dependent Claims 26 and 27**

The embodiments of claims **26 and 27** provide several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination.

In addition to the advantages discussed above with respect to Group X, by *counting a number of tickets having an unallocated portion that is above* (a threshold or a requested portion) it can be determined whether certain tickets have sufficient unallocated portions (e.g., for future allocating).

By *acquiring an additional ticket if this counted number is below a predetermined threshold*, a ticket can be acquired when there is insufficient unallocated portions (e.g., for future allocating). Thus, depending on what such thresholds are, additional tickets can be acquired before there is a danger of being without sufficient unallocated portions (e.g., for future allocating).

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

### **11.3. No Prima Facie Showing of Unpatentability of the Claims of Group XI**

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

#### **11.3.1. No showing that the references suggest *counting a number of tickets having an unallocated portion that is above* anything**

*Group XI*

On pages 17 - 19 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts “shows elements that suggest” such a feature at Figs. 1, 2A, 5, 6 and 6A.

FIG. 1 is a block diagram of a lottery system.

FIGS. 2A and 5 show non-completed lottery tickets.

FIGs. 6A and 6B show fan folded non-completed lottery tickets.

There is no FIG. 6 in Roberts.

Nothing in Roberts suggests that *portions of tickets are allocated*. This has been discussed above, for example in Sections 1.3.1 and 1.4.1. Therefore, nothing in Roberts can suggest *counting a number of tickets having an unallocated portion that is above anything*.

Further, nothing in Roberts or any other reference shows that any tickets are counted, much less *counting a number of tickets having an unallocated portion that is above anything*.

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts. The lack of any motivation to combine or modify the references is discussed below.

### **11.3.2. No showing that the references suggest *acquiring an additional ticket if any condition is true***

On pages 17 - 19 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts “shows elements that suggest” such a feature at Figs. 1, 2A, 5, 6 and 6A.

On pages 17 - 19 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts “shows elements that suggest” such a feature at Figs. 1, 2A, 5, 6 and 6A.

FIG. 1 is a block diagram of a lottery system.

FIGS. 2A and 5 show non-completed lottery tickets.

FIGs. 6A and 6B show fan folded non-completed lottery tickets.

*Group XI*

There is no FIG. 6 in Roberts.

Nothing in Roberts suggests that *additional tickets are acquired if a particular condition (e.g., the counted number of tickets is below a threshold) is true.*

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts.

The lack of any motivation to combine or modify the references is discussed below.

#### **11.3.3. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

The arguments of Section 9.3.2 are reiterated here.

#### **11.4. The Claims of Group XI are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

##### **11.4.1. The references do not suggest *counting a number of tickets having an unallocated portion that is above anything***

Neither Storch nor The Economist nor Roberts mention *counting anything*, much less *counting a number of tickets*, much less *counting a number of tickets having an unallocated portion that is above anything* (e.g., a *threshold* or a *requested portion*).

As discussed repeatedly with respect to previous Groups, no reference suggests that *portions of tickets are allocated*. Therefore, nothing in any reference can suggest *counting a number of tickets having an unallocated portion that is above anything*.

#### **11.4.2. The references do not suggest acquiring an additional ticket if any condition is true**

Neither Storch nor The Economist mention *acquiring an additional ticket* at all. Roberts does not suggest that *additional tickets are acquired if a particular condition (e.g., the counted number of tickets is below a threshold) is true*.

As discussed repeatedly with respect to previous Groups, no reference suggests that *portions of tickets are allocated*. Therefore, nothing in any reference can suggest *counting a number of tickets having an unallocated portion that is above anything*. Therefore no reference can suggest a condition such as whether *a counted number of tickets having an unallocated portion that is above anything is below a threshold*. Therefore, no reference can suggest that *an additional ticket is acquired if such a condition is true*.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group XI, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group XI, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 11.2 "Advantages of Dependent Claim 26 and 27". Accordingly, for at least those reasons, the claims of Group XI are patentable in view of the cited references.

## 12. Group XII

### SEPARATE ARGUMENT OF PATENTABILITY

Group XII includes dependent claims **29, 30, 35 and 36**. Dependent claims **29 and 30** depend from independent claim **25**, and dependent claims **35 and 36** depend from independent claim **31**. Both independent claims are discussed above in Group X. Accordingly, all arguments above with respect to Group X are equally applicable to Group XII, and the claims of Group XII are patentable at least for the same reasons given above for Group X. Moreover, additional arguments are provided below for the patentability of the claims of Group XII, regardless of the patentability of the claims of Group X.

As discussed below, the rejection of the claims of Group XII is flawed because the Examiner has not made a *prima facie* case of unpatentability of any claim of Group XII. The Examiner has not shown all limitations of any claim to be disclosed or suggested by the references. The rejection is also based on improper combinations and modifications of the references without adequate motivation in the prior art for making the proposed combinations and modifications.

Further, no claim of Group XII can be deemed obvious in light of the references of record, alone or in any combination, because the cited references, alone or in any combination, cannot be interpreted in a manner that would disclose or suggest the limitations of any pending claim. Further, the prior art of record does not contain any proper motivation to combine or modify the references in any way which renders any claim of Group XII obvious.

#### 12.1. Dependent Claim 29

Dependent claim **29** is directed to a method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal. The method comprises maintaining a supply of tickets. Each ticket has an unallocated portion thereof. The sum of the unallocated portions of the tickets are calculated. An additional ticket is acquired.

Dependent claim **35** is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim **29**.

### GROUP XII

Claim 30 depends from claim 29, and further recites that the additional ticket is acquired if the calculated sum is below a predetermined threshold.

Dependent claim 36 is directed to an apparatus, and includes a processor operative to perform steps substantially as described above with respect to method claim 30.

For brevity, the discussion below refers to method claim 29, but the arguments are likewise applicable to claims 30, 35 and 36.

## 12.2. Advantages of Dependent Claim 29

In addition to the advantages discussed above with respect to Group X, the embodiment of claim 29 provides several advantages not even recognized, much less disclosed or suggested, by the prior art of record, either alone or in combination. These advantages render the claimed subject matter nonobvious over the cited art.

By *calculating a sum of the unallocated portions of the tickets*, the remaining portions which may be allocated are known. This information is useful to any entity which would desire to allocate portions of tickets.

A great many more advantageous and diverse uses of the claimed invention, both explicit and implicit in the present Application, are possible and would be apparent to those of skill in the art based on the Appellants' disclosure.

## 12.3. No Prima Facie Showing of Unpatentability of the Claims of Group XII

A reading of the rejections of the claims of the Group reveals that the Examiner has consistently ignored or misinterpreted the limitations of the claims. Several limitations are not disclosed or suggested by the references of record. Accordingly, the Examiner has not presented a prima facie case of obviousness of any claim of the Group.

### 12.3.1. No showing that the references suggest *calculating a sum of the unallocated portions of the tickets*

#### GROUP XII

On page 20 of the Final Office Action, the Examiner concedes that Storch does not disclose such a feature, but Roberts “shows elements that suggest ‘*calculating a sum of the unallocated portions of the tickets*’ ” at FIGs. 1, 2A, 5, 6 and 6A.

FIG. 1 is a block diagram of a lottery system.

FIGS. 2A and 5 show non-completed lottery tickets.

FIGS. 6A and 6B show fan folded non-completed lottery tickets.

There is no FIG. 6 in Roberts.

Nothing in Roberts suggests that *portions of tickets are allocated*. This has been discussed above, for example in Sections 1.3.1 and 1.4.1. Further, nothing in Roberts suggests that there are *unallocated portion of the tickets*, much less *calculating a sum* thereof. There would clearly be no need to perform such a calculation in Roberts.

Further, as discussed above, a reference only “suggests” a limitation when there is some showing in the references of record that the prior art would have provided a motivation to modify a reference to result in the “suggested” limitations. There is no showing, purported or otherwise, in any Office Action of facts in the record that would motivate one of ordinary skill in the art to make the proposed modification of Roberts to yield what is purportedly “suggested” by Roberts.

The lack of any motivation to combine or modify the references is discussed below.

### **12.3.2. No showing of a proper motivation to combine the references**

The Examiner simply has not shown a motivation in the prior art of record to modify or combine the disparate references in the way suggested by the Examiner, or in any other manner that renders the claims obvious.

The arguments of Sections 3.3.2 and 9.3.2 are reiterated here.

### **12.4. The Claims of Group XII are Allowable Over the Cited References**

As described above, the Examiner has failed to provide a *prima facie* showing of obviousness. In addition, the references cannot be combined in any manner that would render the claims of the Group obvious.

### **GROUP XII**

**12.4.1. The references do not suggest calculating a sum of the unallocated portions of the tickets**

Simply put, no reference of record suggests that a ticket may have an *unallocated portion*. More specifically, no reference suggests that *a sum of unallocated portions of tickets are calculated*.

In conclusion, the Examiner has not set forth a *prima facie* case of obviousness of the claims of Group XII, none of the references (alone or in combination) disclose or suggest the limitations of the claims of Group XII, and none of the references (alone or in combination) possess the advantages conferred by those limitations, as discussed in detail above in Section 12.2 "Advantages of Dependent Claim 29". Accordingly, for at least those reasons, the claims of Group XII are patentable in view of the cited references.

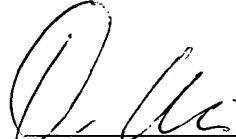
## CONCLUSION

Thus, the Examiner's rejection of the pending claims are is improper at least because the all pending claims are directed to statutory subject matter. In addition, the references, alone or in combination, do not disclose or suggest all the limitations of any claim. In addition, in the obviousness rejections the Examiner has improperly combined the references because there is no adequate reasoning or support in the prior art for making the proposed combination. Therefore, Appellants respectfully request that the Examiner's rejections be reversed.

If any issues remain, or if there are any further suggestions for expediting allowance of the present application, please contact Dean Alderucci using the information provided below.

Appellants hereby request any extension of time that may be required to make this Appeal Brief timely. Please charge any fees that may be required for this paper, or credit any overpayment, to Deposit Account No. 50-0271.

Respectfully submitted,



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June 30, 2003  
Date



## APPENDIX A

### CLEAN COPY OF CLAIMS INVOLVED IN THE APPEAL

Claims 1 – 36 are pending and appealed.

Claims 1, 6, 11, 12, 13, 17, 21 – 25 and 31 are independent.

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**GROUP 3600**

1. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:
  - determining a monetary value;
  - allocating a portion of a ticket, the portion being based on the monetary value;
  - outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket; and
  - storing the ticket identifier and the portion identifier.
2. The method of claim 1, in which the step of determining a monetary value comprises:
  - determining a monetary value based on an amount of change due for a purchase.
3. The method of claim 1, further comprising:
  - selecting the ticket from a plurality of tickets.
4. The method of claim 3, in which the step of selecting the ticket from a plurality of tickets comprises:
  - selecting a ticket having an unallocated portion at least as great as the monetary value.

CLEAN COPY OF CLAIMS INVOLVED IN THE APPEAL

5. The method of claim 3, in which the step of selecting the ticket from a plurality of tickets comprises:

    determining a set of tickets that each have an unallocated portion at least as great as the monetary value; and

    selecting a ticket from the set of tickets which has a minimal unallocated portion.

6. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

    a storage device; and

    a processor connected to the storage device,

    the storage device storing

        a program for controlling the processor; and

    the processor operative with the program to:

        determine a monetary value;

        allocate a portion of a ticket, the portion being based on the monetary value;

        output a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the ticket; and

        store the ticket identifier and the portion identifier in the storage device.

7. The apparatus of claim 6, in which the processor is further operative with the program to: determine a monetary value based on an amount of change due for a purchase.

8. The apparatus of claim 6, in which the processor is further operative with the program to: select the ticket from a plurality of tickets.

9. The apparatus of claim 8, in which the processor is further operative with the program to: select a ticket having an unallocated portion at least as great as the monetary value.

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10. The apparatus of claim 8, in which the processor is further operative with the program to:  
determine a set of tickets that each have an unallocated portion at least as great as the  
monetary value; and  
select a ticket from the set of tickets which has a minimal unallocated portion.

11. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale  
terminal, comprising:

determining a monetary value;  
allocating a portion of each ticket of a plurality of tickets, the portion of each ticket being  
associated with a portion of the monetary value;  
outputting a plurality of ticket identifiers that identify the plurality of tickets and a  
plurality of portion identifiers that identify the allocated portions of each ticket; and  
storing the ticket identifiers and the portion identifiers.

12. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale  
terminal, comprising:

a storage device; and  
a processor connected to the storage device,  
the storage device storing  
a program for controlling the processor; and  
the processor operative with the program to:  
determine a monetary value;  
allocate a portion of each ticket of a plurality of tickets, the portion of each ticket  
being associated with a portion of the monetary value;  
output a plurality of ticket identifiers that identify the plurality of tickets and a  
plurality of portion identifiers that identify the allocated portions of each ticket; and  
store the ticket identifiers and the portion identifiers in the storage device.

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13. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

    determining an amount of change due for a purchase;

    determining a monetary value based on the amount of change due;

    selecting a ticket from a plurality of tickets, the selected ticket having an unallocated portion at least as great as the monetary value;

    allocating at least a portion of the selected ticket, the portion being based on the monetary value;

    outputting a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket; and

    storing the ticket identifier and the portion identifier.

14. The method of claim 13, in which the step of determining a monetary value comprises:

    rounding the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and

    setting the monetary value equal to the rounded change amount.

15. The method of claim 14, in which the step of rounding the amount of change due comprises:

    rounding down the amount of change due to a predetermined multiple, thereby generating a rounded-down change amount.

16. The method of claim 13, further comprising:

    outputting an offer to exchange a fractional lottery ticket for change due.

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17. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

    a storage device; and

    a processor connected to the storage device,

    the storage device storing

        a program for controlling the processor; and

    the processor operative with the program to:

        determine an amount of change due for a purchase;

        determine a monetary value based on the amount of change due;

        select a ticket from a plurality of tickets, the selected ticket having an unallocated portion at least as great as the monetary value;

        allocate at least a portion of the selected ticket, the portion being based on the monetary value;

        output a ticket identifier that identifies the ticket and a portion identifier that identifies the allocated portion of the selected ticket; and

        store the ticket identifier and the portion identifier in the storage device.

18. The apparatus of claim 17, in which the processor is further operative with the program to:

    round the amount of change due to a predetermined multiple, thereby generating a rounded change amount; and

    set the monetary value equal to the rounded change amount.

19. The apparatus of claim 18, in which the processor is further operative with the program to:

    round down the amount of change due to a predetermined multiple, thereby generating a rounded-down change amount.

20. The apparatus of claim 17, in which the processor is further operative with the program to:

output an offer to exchange a fractional lottery ticket for change due.

21. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

receiving a ticket identifier that identifies a ticket and a portion identifier that identifies an allocated portion of the ticket;  
determining a prize value of the ticket; and  
determining a portion of the prize value based on the allocated portion of the ticket.

22. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

a storage device; and  
a processor connected to the storage device,  
the storage device storing  
a program for controlling the processor; and  
the processor operative with the program to:

receive a ticket identifier that identifies a ticket and a portion identifier that identifies an allocated portion of the ticket;

determine a prize value of the ticket; and  
determine a portion of the prize value based on the allocated portion of the ticket.

23. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- determining a monetary value;
- allocating at least a portion of a ticket, the portion being based on the monetary value;
- determining a prize value of the ticket; and
- providing a portion of the prize value based on the allocated portion of the ticket.

24. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- a storage device; and
- a processor connected to the storage device,
- the storage device storing
  - a program for controlling the processor; and
- the processor operative with the program to:
  - determine a monetary value;
  - allocate at least a portion of a ticket, the portion being based on the monetary value;
  - determine a prize value of the ticket; and
  - provide a portion of the prize value based on the allocated portion of the ticket.

25. A method for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

- maintaining a supply of tickets, each ticket having an unallocated portion thereof; and
- acquiring an additional ticket.

26. The method of claim 25, in which the step of acquiring an additional ticket comprises:
  - counting a number of tickets having an unallocated portion that is above a first predetermined threshold; and
  - acquiring an additional ticket if the number of tickets having an unallocated portion that is above the first predetermined threshold is below a second predetermined threshold.
27. The method of claim 25, in which the step of acquiring an additional ticket comprises:
  - receiving an indication of a requested portion;
  - counting a number of tickets having an unallocated portion that is above the requested portion; and
  - acquiring an additional ticket if the number of tickets having unallocated portion that is above the requested portion is below a predetermined threshold.
28. The method of claim 25, in which the step of acquiring an additional ticket comprises:
  - acquiring a predetermined number of additional tickets.
29. The method of claim 25, further comprising:
  - calculating a sum of the unallocated portions of the tickets.
30. The method of claim 29, in which the step of acquiring an additional ticket comprises:
  - acquiring an additional ticket if the calculated sum is below a predetermined threshold.

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31. An apparatus for facilitating the purchase of fractional lottery tickets using a point-of-sale terminal, comprising:

    a storage device; and

    a processor connected to the storage device,

    the storage device storing

        a program for controlling the processor; and

    the processor operative with the program to:

        maintain a supply of tickets, each ticket having an unallocated portion thereof;

and

    acquire an additional ticket.

32. The apparatus of claim 31, in which the processor is further operative with the program to:

    count a number of tickets having an unallocated portion that is above a first predetermined threshold; and

    acquire an additional ticket if the number of tickets having an unallocated portion that is above the first predetermined threshold is below a second predetermined threshold.

33. The apparatus of claim 31, in which the processor is further operative with the program to:

    receive an indication of a requested portion;

    count a number of tickets having an unallocated portion that is above the requested portion; and

    acquire an additional ticket if the number of tickets having unallocated portion that is above the requested portion is below a predetermined threshold.

34. The apparatus of claim 31, in which the processor is further operative with the program to:

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acquire a predetermined number of additional tickets.

35. The apparatus of claim 31, in which the processor is further operative with the program to:

calculate a sum of the unallocated portions of the tickets.

36. The apparatus of claim 35, in which the processor is further operative with the program to:

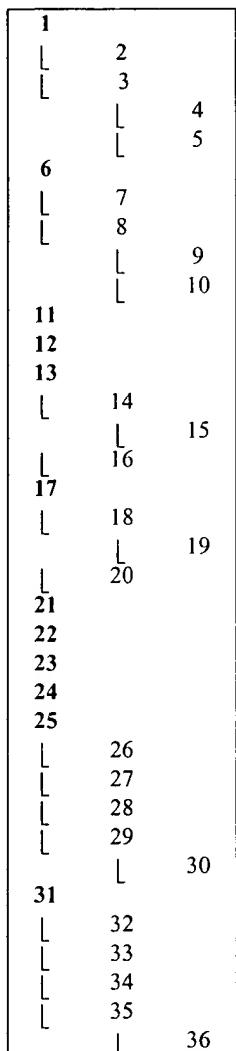
acquire an additional ticket if the calculated sum is below a predetermined threshold.



**APPENDIX B**  
**CHART SHOWING CLAIM DEPENDENCIES**

Claims 1 – 36 are pending.

Claims 1, 6, 11, 12, 13, 17, 21 – 25 and 31 are independent.



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